

U.S. Environmental Protection Agency

Hawaii Department of Agriculture

FY2015 Final End-of-Year Review

Pesticide Performance Partnership Grant

Executive Summary- This report covers workplan activities conducted in FY15, and is based on discussions and review of documents throughout the year and during the end of year visit. Recommendations for improvements can be found within the body of this report. Recommendations focus primarily on reducing a large backlog of inspection files that need review and possible case development, securing a backup laboratory if state lab equipment breaks down, and improving inspections and report writing. HDOA must also focus on revising the enforcement response policy, and forwarding more inspection files to EPA for review and/or follow-up. This report covers the first year of a multi-year performance partnership grant (PPG) between Hawaii Department of Agriculture and EPA Region 9. This PPG was put into place to ease administrative burdens on HDOA and to allow for more long-term planning for the HDOA Pesticide Program.

I. BACKGROUND

A. General

- 1. Project Period:** October 1, 2014 – September 30, 2015.
- 2. EPA Assistance Agreement Number:** #BG00T64415-1
- 3. Review method:** On-site
- 4. Review participants:**

EPA: Mary Grisier, Hawaii Pesticide Project Officer, Scott McWhorter, EPA FIFRA Inspector/Enforcement Liaison

Grantee: Thomas Matsuda, Pesticide Program Manager, Victoria Matsumura, Case Preparation Officer

- 5. Review date(s) and location:** November 16-19, 2015 at the Hawaii Department of Agriculture offices in Honolulu.

B. Scope of Review

The Hawaii Department of Agriculture (HDOA) has primary enforcement responsibility over pesticide use activities in the State of Hawaii and is the lead state agency for the enforcement of the Hawaii Pesticides Law (Chapter 149A, Hawaii Revised Statutes) and Hawaii Administrative Rules (Chapter 66, Title 4). There are approximately 1,150,000 acres in farmland, 7,000 farms, 6,400 agricultural workers, 3,800 Agricultural Operators, 1,200 certified applicators, 22 licensed Restricted Use Pesticide (RUP) dealers, 18 pesticide producing establishments, and seven licensed aerial applicators in the state of Hawaii. Major crops in Hawaii include seed corn, coffee, papaya, macadamia and nursery plants. Average farm size in Hawaii is 150 acres. HDOA maintains a database of all pesticides licensed in Hawaii. The HDOA Pesticide program consists of approximately

14 individuals over 4 islands performing inspection, education, registration, administrative, and other pesticide program activities.

The Hawaii Pesticide program is supported by both State (general and revolving) and federal (USDA and USEPA) funds. HDOA and USEPA Region 9 had one active Performance Partnership Grant (PPG) with pesticide related activities to be carried out in Federal Fiscal Year 2015. The purpose of the PPG is to reduce paperwork and provide administrative relief and flexibility to HDOA. FY15 was the first year of a multi-year agreement.

The FY15 end-of-year evaluation was primarily accomplished by reviewing quarterly reports and correspondence received from HDOA throughout the year, and an on-site visit by the project officer and FIFRA inspector from EPA Region 9. Additionally, the inspector conducted oversight inspections with staff from HDOA. Information gathered was compared to the outputs and standards in the cooperative agreements to determine if HDOA had met its commitments.

II. FINANCIAL

A. Budget Analysis

The following table summarizes funding and expenditures for the FY15 cooperative agreement. In FY15, approximately three FTE were supported by EPA funding (Environmental Health Specialists II & III, Chemist).

Federal Financial Reports (FFRs) for FY15 had not been received at the time of this writing.

| Work Plan Component | EPA Funding | Grantee Funding* | Total Funding |
|----------------------------|--------------------|-------------------------|----------------------|
| Enforcement | \$186,200 | \$34,672 | \$220,872 |
| Programs | \$116,125 | \$22,038 | \$138,163 |
| C&T | \$ 30,000 | \$30,255 | \$ 60,255 |
| Supplemental \$ | \$ 0 | \$ 0 | \$0 |
| TOTAL | \$332,325 | \$ 86,965 | \$419,290 |

* State is required to provide 50% match in C&T, 15% (by policy) for other programs.

Re-budgeting –Rebudgeting consisted of a \$786.00 rescission on the part of EPA.

III. GENERAL GRANT ADMINISTRATION

A. Recommended Actions for Grants Office - None

IV. COMPLIANCE AND ENFORCEMENT

A. Grantee Reports

1. **5700-33H report** – attached as Appendix 1.
2. **Annual Summary of Inspections and Enforcement Actions**

HDOA exceeded the number of projected inspections (311 projected, 314 completed). This is approximately 74 fewer inspections conducted than in FY14. HDOA issued four civil complaints in FY15, up from one in FY14. Forty warning letters were issued, and one case was assessed a fine in FY15. There were eleven inspection files referred to EPA for enforcement review and possible development in FY15, up from eight forwarded in FY14. HDOA should continue to forward cases that, for any reason, may present difficulties for the state to pursue.

B. Case File and Enforcement Action Evaluation

1. Significant Cases (FIFRA Section 27)

There were no formal high level episodes referred to HDOA in FY15. However, HDOA saw a significant increase in pesticide-related complaints from individuals and groups throughout the state. Many of these complaints focused on alleged misuse of pesticides by large seed-corn companies, as well as state and local departments of transportation doing roadside weed control. In addition, some complaints centered on HDOA itself, alleging that HDOA does not adequately enforce state and federal regulations. It should be noted that HDOA follows up on every complaint that is received; with essentially one inspector on each island, this level of follow-up has become nearly impossible to maintain, while also attempting to conduct routine, neutral scheme inspections. HDOA is in the process of hiring additional inspectors for Oahu, Kauai and Hawaii islands, as well as an additional case developer for Oahu. HDOA has initiated discussions with state and local transportation departments to ensure that best management practices are being used when roadside spraying occurs. EPA Region 9 is closely monitoring this situation and is in regular contact with HDOA.

2. Routine Inspections

Oversight Inspections Conducted During End of Year Review

Inspectors should follow all inspection procedures for conducting federal inspections, including presenting valid credential (e.g., in one case, a credential was expired), presenting a written notice of inspection describing the reason(s) for inspection (e.g., in one case, a violation was suspected but not identified) and a signed receipt for samples (e.g., in one case, no receipt was given or was missing from the report). Inspectors

should routinely collect a similar and adequate amount of documentation for all producer establishment inspections, including taking photographs, photo copies for purchases and sales invoices* and production logs*, maintenance and repair logs (a years' worth), manufacturing or repackaging agreements, labels, and all other relevant FIFRA and RCRA (waste manifests) records. Records sampled and collected should show evidence that they were maintained for a minimum of 2 years in most cases. If information that is routinely collected is unavailable at the time of inspection, this information should be requested for a later date to be sent to the state or in some cases be sent directly to EPA).¹ If information routinely collected does not exist, it should be fully documented in the report that this information was requested and it does not exist. If it exists but elsewhere, the inspector must still request this information be sent to either the state or EPA (e.g., in one case, the inspector did not collect information or request that it be sent, instead the inspector took a statement that the information exists but is not maintained at the facility. This is not adequate. All of these issues must be addressed to improve inspections.

Recommendation 15-01: Inspectors should review the *2013 FIFRA Inspector's Manual* and ensure that all inspections follow the requirements for document collection, issuance of appropriate forms and that adequate narratives accompany all inspections.

Inspection Reports Reviewed During End of Year Review

Approximately thirty inspection files were reviewed during the end of year visit, in addition to files that were sent to EPA for enforcement/review. Inspection files were randomly selected from actionable and non-actionable inspections. Inspections selected represented the work of five different inspectors. In general, the report narratives tend to be short. If there is nothing to report, the narrative should explain why a thorough investigation did not occur. When narratives are short, they often lack critical information. It is not clear whether inspectors are not disclosing information, or whether they are not documenting all aspects of the inspection. Specifically for Pesticide Establishment Inspections, inspectors should consult the *2013 FIFRA Inspectors' Manual* and contact EPA for assistance to ensure adequate information is being documented. All of these issues must be addressed to improve inspection report writing.

There were no Special Requests issued to HDOA during FY15. HDOA did not complete any container/containment inspections, as there are no facilities currently identified in Hawaii that meet the necessary criteria. The Pesticide Container/Containment Inspection and Enforcement Accomplishment Report (EPA C/C Form 5700-33H) is included in Appendix 2.

C. Compliance Priority – Worker Protection Standard (WPS)

1. Reports

¹ *e.g., purchases, sales, or production records might be identified as FIFRA CBI and should be sent directly to the FIFRA Document Control Officer in Region 9.

a) The Pesticide Worker Protection Standard Inspection and Enforcement Accomplishment Report (WPS Form 5700-33H) is included as Appendix 2.

2. Significant WPS Cases (FIFRA Section 27) - none

3. WPS oversight inspections – EPA Inspector McWhorter conducted one oversight inspection of a WPS Tier 1 inspection during the end of year review.

4. WPS case file evaluation

HDOA conducted seventeen WPS Tier 1 inspections at establishments throughout Hawaii, up from five in FY 14. There were no enforcement actions issued for any Tier 1 inspections conducted in FY15. There were no Tier 2 inspections conducted, while there were five the previous year.

5. Worker Protection Risk-Based Targeting Strategy

a) Implementation of Risk-Based Targeting Strategy

A WPS targeting strategy was developed in 1994. Targeting was based partly on how many restricted-use pesticides were purchased by growers, as well as how many workers were employed by the establishment. Since that time, agriculture has changed dramatically in Hawaii. The number of large farms with many workers has greatly decreased. Farms are smaller (average farm size is 150 acres) and growers buy smaller quantities of pesticides. Inspectors have found that they can identify establishments that fall under the WPS by conducting routine agricultural use inspections and asking questions related to worker activity during the inspection. They will then return at a later date to conduct a WPS inspection. Larger establishments are inspected approximately every two years.

D. Inspection and Enforcement Support

1. Training

HDOA conducts semi-annual pesticide training workshops for all HDOA Pesticide Program staff (inspectors, education, and registration staff) and outer Pacific Island pesticide programs in May and November of each year. The workshop in November also includes medical monitoring and respirator fit-testing for inspectors. In 2015, the project officer and the EPA inspector attended the November workshop, in conjunction with the end of year visit. The EPA inspector presented updates from EPA, including enforcement priorities and highlights from the revised worker protection standards. Federal Enforcement priorities for Hawaii include Worker Protection Tier 1 inspections,

Product Integrity (including taking more samples during inspections), and the ongoing compliance monitoring of basil farmers in Hawaii.

In FY15, HDOA had four federally-credentialed inspectors. Training records were properly maintained at the Honolulu office, and inspectors had met the commitments outlined in the FIFRA inspector credential authorization agreement. All four credentials expired on November 1, 2015. As of this writing, EPA is in the process of issuing new credentials.

Below is a partial list of training courses attended by HDOA staff in FY15:

| TRAINING/MEETING | DATE |
|--------------------------------------|-------------|
| Executive Lab PREP, GA | 4/2015 |
| Pollinator PREP, OR | 5/2015 |
| FIFRA Pesticide Analyst Workshop, OK | 5/2015 |
| Registration PREP, VA | 7/2015 |
| C&T PACT Workshop, PA | 8/2015 |
| ASPCRO Annual Mtg, FL | 8/2015 |
| ALSTAR/NPIRS Conference, NV | 9/2015 |

2. Enforcement Response Policy

The Hawaii Department of Agriculture revised and adopted its Pesticide Enforcement Action and Penalty Assessment Schedule on October 24th, 2006. Review of case files indicates that HDOA follows its enforcement response policy, however there are numerous areas where the policy is in need of updating. In FY14, the Department of Agriculture was able to fill several positions on the Governor's Pesticide Advisory Committee, which has responsibility for revision of pesticide regulations in Hawaii, as well as revising the enforcement response policy. HDOA is encouraged to continue to identify those areas that are lacking in the ERP, so that at a future date, changes can be made.

3. Neutral Inspection Scheme

Applicators that are likely to use more RUPs are inspected more frequently than those that do not. This is based on amounts of RUPs purchased divided by the number of applicators employed by a business. With regard to marketplace inspections, they are conducted primarily based on complaints, rather than through a neutral inspection scheme. This has been discussed during previous reviews as an area for additional focus by HDOA. HDOA should consider whether these overall approaches to targeting inspections are still appropriate and effective.

4. Enforcement Procedures

Since at least 2012, there has been a large backlog of inspection files to be reviewed by enforcement staff. At the time of the end of year review, there were approximately 700 inspection files in need of review, some dating back to 2008. This is a major concern, and has resulted in delays for both state and federal enforcement proceedings. Federal inspection reports should be referred to EPA at least quarterly per the cooperative agreement. Recent receipt of reports for inspections that occurred as early as 2012 were not received until 2015. Many of these cases were referred to EPA for enforcement action but were closed solely based on our statute of limitations. Also since at least 2012, there has been a large number of proposed enforcement actions that remain with the State deputy attorney general (AG) for review and concurrence. This is very concerning given the large number of complaints drafted (i.e., in the hundreds) versus the small amount of enforcement actions taken (i.e., one for a penalty in 2015). Cases must be reviewed and concluded in a timely and appropriate manner. EPA should be alerted when new cases are being forwarded to the AG that are not being reviewed in timely manner. For high priority cases they should be elevated to EPA for review to determine the appropriate enforcement response (e.g., a Notice of Warning might be adequate). For most of FY15, HDOA had two case development officers that reviewed all files as they came in from the inspection staff. In late FY15, a new deputy attorney general was assigned to pesticide cases in Hawaii. By the end of FY15, four civil actions had been reviewed by the deputy, and then issued by HDOA.

Recommendation 15-02: The process for reviewing inspection files, and developing and ultimately issuing civil actions must be improved. Inspection reports that may present difficulties for HDOA should be forwarded to EPA.

5. Quality Assurance

HDOA's Pesticide Program Quality Assurance Program Plan (QAPP) was approved by EPA on February 24, 2014. Major components of the QAPP include program responsibilities, sampling design, methods and sample handling. The Chemical Analysis Laboratory (CAL) in Hawaii operates a state-of-the-art pesticide residue laboratory for the analysis of a wide range of plant, soil, product and environmental samples in support of enforcement and registration activities. In FY15, the CAL participated in EPA's check sample program, running 136 tests on 10 samples provided by EPA. Analysis results were satisfactory for both soil and vegetation samples. In FY15, the CAL developed a list of pesticides to test for residues in Hawaii bees and honey.

It should be noted that the laboratory experienced significant down time of its LC/MS equipment during FY15. Delays in sample analysis can negatively impact the timeliness of enforcement cases, and also create frustration for individuals who believe that they may have been impacted by pesticide drift.

Recommendation 15-03: HDOA should identify a back-up laboratory that can assist with sample analysis should equipment failures occur in the future. EPA has had discussions with HDOA on this issue, and HDOA has initiated contact with the CA Department of Food and Agriculture laboratory.

6. Special Activities

HDOA continues to consult and coordinate with other State agencies on Section 18 emergency exemption requests and special local needs registration applications. Two experimental use permit applications were pending in the fourth quarter.

Outer Pacific Island Support - In cooperation with EPA, HDOA is providing ongoing support to outer Pacific island pesticide program staff on import, inspection, enforcement, and certification issues. As in previous years, HDOA extended an invitation to outer island inspectors to attend the Inspector Workshops. Attendance at the workshops provided an opportunity for the inspectors to receive medical monitoring exams and respirator fit tests, as well as to participate in mock inspections with fellow inspectors and to receive important training.

Kauai Joint Fact Finding Taskforce – In December 2014, a process was begun to examine possible health and environmental impacts associated with the use of pesticides applied to genetically-modified agricultural products. The County of Kauai and the HI Department of Agriculture were partners in the project by providing funding support and collaborating with the state and the consultant throughout the process. A draft of the findings was released in March 2016.

Integrated Pesticides Information System - In April 2014, HDOA received approval from then-Governor Abercrombie to develop an Integrated Pesticides Information System within the Pesticides Branch that will include the enforcement, registration and certification programs, as well as the Chemical Analysis Laboratory. Once implemented, this system will allow staff from all programs to coordinate their activities, and will also provide greater access to pesticide information by the public. A demonstration of progress to date was provided by the contractor during the inspector workshop in November, and great progress has been made in developing this system. Several key staff members are involved in the development of this system, and when completed, it will provide needed coordination between programs within the Pesticides Branch.

Online Reporting of RUP Sales – As a result of Act 105, passed in FY13, HDOA is required to post RUP sales on a monthly basis. The posting provides a summary of all sales, not broken down by purchaser. On April 1, 2015, HDOA posted the sales records by month by County in pounds of active ingredients for all of 2014.

E. New Legislation and Regulations

Eight bills were introduced in the Hawaii Legislature relating to pesticides during FY15, but none were passed.

F. Action Items from Previous Reviews

Recommendation 10-02: HDOA should review their enforcement penalty policy and identify areas that need revision or update.

Status: HDOA has identified elements of the penalty policy that are in need of revision. Revising the penalty policy will require a formal change in Hawaii's Pesticide Law. The current process for revising the policy requires assistance from a pesticide advisory committee, whose members are appointed by the Chairperson. HDOA should make every effort to streamline this process and revise deficiencies in the pesticide penalty policy.

Recommendation 13-01: HDOA must forward inspections to EPA that either 1) were conducted with a Federal credential, or 2) reveal a potential federal violation.

Status: Eleven files were sent to the Regional Office during FY15 for review and possible enforcement. This does not reflect all of the inspections that were conducted with a federal credential or that potentially have federal violations. There remains a large backlog of inspection files. This recommendation remains open.

Recommendation 13-02: HDOA has seen a downward trend in overall inspection activity in FY13, especially with regard to WPS Tier 1 inspections. HDOA should make every effort to increase the number of WPS Tier 1 inspections in the coming year.

Status: HDOA has improved inspection numbers, particularly as it relates to WPS, Seventeen WPS Tier 1 inspections were conducted, up from five in FY14. This recommendation is closed.

Recommendation 13-03: HDOA should formally request that EPA send the enforcement liaison to the upcoming November workshop at the HI Department of Agriculture. This will ensure that state inspectors are provided the most up-to-date requirements for their work under the cooperative agreement.

Status: The EPA inspector was able to attend the FY15 November workshop, and he also participated in oversight inspections with HDOA inspectors. He provided information regarding EPA enforcement priorities and other assistance to inspectors. This recommendation is closed.

Recommendation 13-04: HDOA must identify ways to address the backlog of inspection files, whether through assigning inspection staff to review files or hiring additional case developers. Solutions to the backlog that also exists with cases at the Deputy Attorney General's office must also be identified.

Status: The backlog of inspection files continues to be an issue for HDOA. Steps have been taken to decrease the backlog using a temporary position, as well as having inspectors help review inspection files for actionable violations. In February 2016, the senior case developer retired, leaving one full-time case developer in the Branch. The number of inspection files will continue to grow, however, and HDOA should put every effort into hiring an additional case developer. This recommendation remains open.

Recommendation 13-05: HDOA is asked to identify those policies and documents in need of revision and a plan put in place to make the necessary updates.

Status: In particular, the enforcement penalty policy is in need of revision. This recommendation remains open.

Recommendation 13-06: HDOA should ensure that the POINTS system is updated on a yearly basis, and that progress is made in evaluating pesticides of interest to Hawaii.

Status: The POINTS database has been updated for FY15. This recommendation is closed.

F. Conclusions and Recommendations for Compliance/Enforcement

EPA continues to have significant concerns with the backlog of inspection files to be processed, and the resulting lack of enforcement actions issued. More inspections should be forwarded to EPA for review/enforcement. HDOA should work with EPA's inspector to make improvements to inspections and report writing. HDOA should ensure that the enforcement penalty policy is revised and strengthened. A backup laboratory should be identified to assist if HDOA's lab equipment has breakdowns.

V. PROGRAMS

A. Worker Safety – C&T

1. Previous Recommendations - none

2. Accomplishments

a) Work-Plan Commitments & National Program Priorities

HDOA had 1092 certified commercial and 297 private applicators at the end of FY15. HDOA administered exams and reviewed 167 courses for continuing education units, compared to 180 the previous year. HDOA also provided 5 presentations to certified applicators during the course of the year, down from 19 the year before. The education program at HDOA lost one staff member during the 3rd quarter of FY15. Honolulu staff covered exam administration and consultative visits on Oahu, Kauai, Maui and Molokai. The island of Hawaii is covered by an additional employee based in Hilo. Fifteen courses were monitored by HDOA in FY15. Certification reporting in CPARD was completed by HDOA in a timely manner.

HDOA's databases for certified applicators as well as for tracking continuing education units are cumbersome and not integrated. Once implemented, the Integrated Pesticides Information System will allow the Education staff to manage and review courses, track classes, exam results and credits, as well as produce quarterly reports on all certification and training activities. This database will ultimately be an important and timesaving tool for staff.

HDOA worked closely with the Cooperative Extension Service (CES), meeting at least twice per year with representatives from CES Pesticide Applicator Training Program, at the University of Hawaii. HDOA also meets with the Hawaii Pest Control Board, which reviews and approves applications for new pest control businesses in the state. University personnel travel to each of the neighbor islands to prepare applicators in core topics for the certification exam on a yearly basis.

Certification cards issued in Hawaii currently have a photo ID and bar code. Annual C&T Plan Reports for Hawaii and other states are available at: <http://cpard.wsu.edu/>

3. Conclusions and Recommendations

All negotiated outputs have been satisfactorily met for FY15.

B. Worker Safety - WPS

1. Previous Recommendations - none

2. Accomplishments

a) Work-Plan Commitments & National Program Priorities

HDOA conducted 17 WPS training sessions, reaching 129 participants. Seven consultative visits were also held; these are scheduled when a new applicator becomes certified, or, if an applicator has received a notice of warning. A visit may be made to ensure that the applicator has subsequently come into compliance. HDOA is also responding to a recent increase in immigrant farmers on Oahu by providing pesticide safety and WPS training at key locations. HDOA also provided outreach using the updated How to Comply Manual to agricultural establishments. HDOA meets several times per year with the University of Hawaii Cooperative Extension and the Pest Control Board of the Department of Commerce and Consumer Affairs to discuss training and WPS issues.

The agricultural landscape in Hawaii has changed from the dominance of sugar cane and pineapple plantations to many small farms where ethnically-diverse owners grow a multitude of minor crops. This has resulted in farmers who are unaware of or unable to understand pesticide product labels, as well as those who may understand but choose not to comply with labels, as seen with several basil farmers in Hawaii. Education staff at HDOA is working on a project to develop visual identification cards for crop/pest identification, which will go online in the future, and will ultimately be available in multiple languages.

3. Conclusions and Recommendations

All negotiated outputs have been satisfactorily met for FY15.

C. Water Quality

1. Previous Recommendations - none

2. Accomplishments

a) Work-Plan Commitments & National Program Priorities:

The HDOA Pesticides of Interest Tracking System (POINTS) system was updated for FY15. HDOA has evaluated 53 of 79 Pesticides of Interest (79%), is actively managing

17 of 18 Pesticides of Concern (POC; 94%) and is demonstrating progress for 10 of 17 managed POCs (59%). HDOA evaluated several products for ground water concerns during FY15, including, cyantraniloprole and flupyradifurone. It was determined that both must be licensed as restricted use pesticides. HDOA uses modeling to determine whether new chemicals may have the potential to leach into groundwater. Restricted use pesticide sales records are monitored to identify products that may affect water quality. DOH is responsible for implementing the pesticides NPDES permit program in Hawaii.

3. Conclusions and Recommendations

All negotiated outputs have been satisfactorily met for FY15.

D. Endangered Species

1. Previous Recommendations - none

2. Accomplishments

a) Work-Plan Commitments & National Program Priorities

No formal reviews were requested in FY15.

3. Conclusions and Recommendations

All negotiated outputs have been satisfactorily met for FY15.